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ABSTRACT

Research on elementary teaching practices has provided a list of effective teacher behaviors. This list can be used as a menu from which administrators and teachers can select objectives that will serve the teachers as goals for improvement and the administrators as criteria for teacher evaluation. The behaviors listed in this paper have been divided into five areas. First, as an organizer the teacher determines that students are ready, selects materials for variety, prepares the materials prior to the lesson, presents the materials appropriately, and handles the materials in an orderly manner. Second, as an instructor the teacher determines that material has academic content, gives students clear directions, emphasizes main points, asks low and high order questions, conducts reviews, and ignores irrelevancies. Third, as an expediter the teacher begins promptly, shifts without delays, uses smooth transitions, maintains momentum, and keeps on task. Fourth, as a facilitator the teacher circulates and supervises seatwork, assists individual students, checks comprehension, praises specific behavior, evaluates responses, and explains errors. Fifth, as a monitor the teacher specifies rules of conduct, stops or prevents misconduct, and suggests alternative behaviors. The research supporting adoption of the behaviors is cited. Six pages of references are also included. (PGD)

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SELECTING OBJECTIVES FOR SUPERVISION IN THE ELEMENTARY CLASSROOM

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SELECTING OBJECTIVES FOR SUPERVISION IN THE ELEMENTARY CLASSROOM

The starting point of the successful supervisory cycle will be the identification of objectives by the school staff who have determined their own goals. The strategy explained here is designed for elementary and middle school administrators, supervisors and teachers who are interested in involving the entire staff in designing teacher observations to fit the needs of the particular school and its personnel. Particular emphasis is placed on involving participants in going through the process of setting goals from a menu of research-based instructional behaviors and then pinpointing areas for observation.

The theoretical base for the strategy sees teaching as a personal design and the teacher as a professional decision maker (Lanier, 1982; Lieberman and Miller, 1984). Within this personal design, it is important to know what skills and behaviors both the staff as a whole and each individual teacher deem important. This procedure is targeted at acknowledging teachers as professional decison makers and at having them collectively establish the goals for the school and then select instructional behaviors which will best meet these goals. After this, the supervision process is determined (see Figure 1). Klausmeier (1985) has found that when teachers set goals they want to achieve and are supported by the principal and district office, improvement almost always occurs.

Before professional decisions are made, it seems reasonable to have both teachers and administrators look at what the last ten years of research has established. This helps to diminish the discrepancy between the perceptions of administrators and elementary teachers of the importance of classroom

THE SUPERVISORY PROCESS

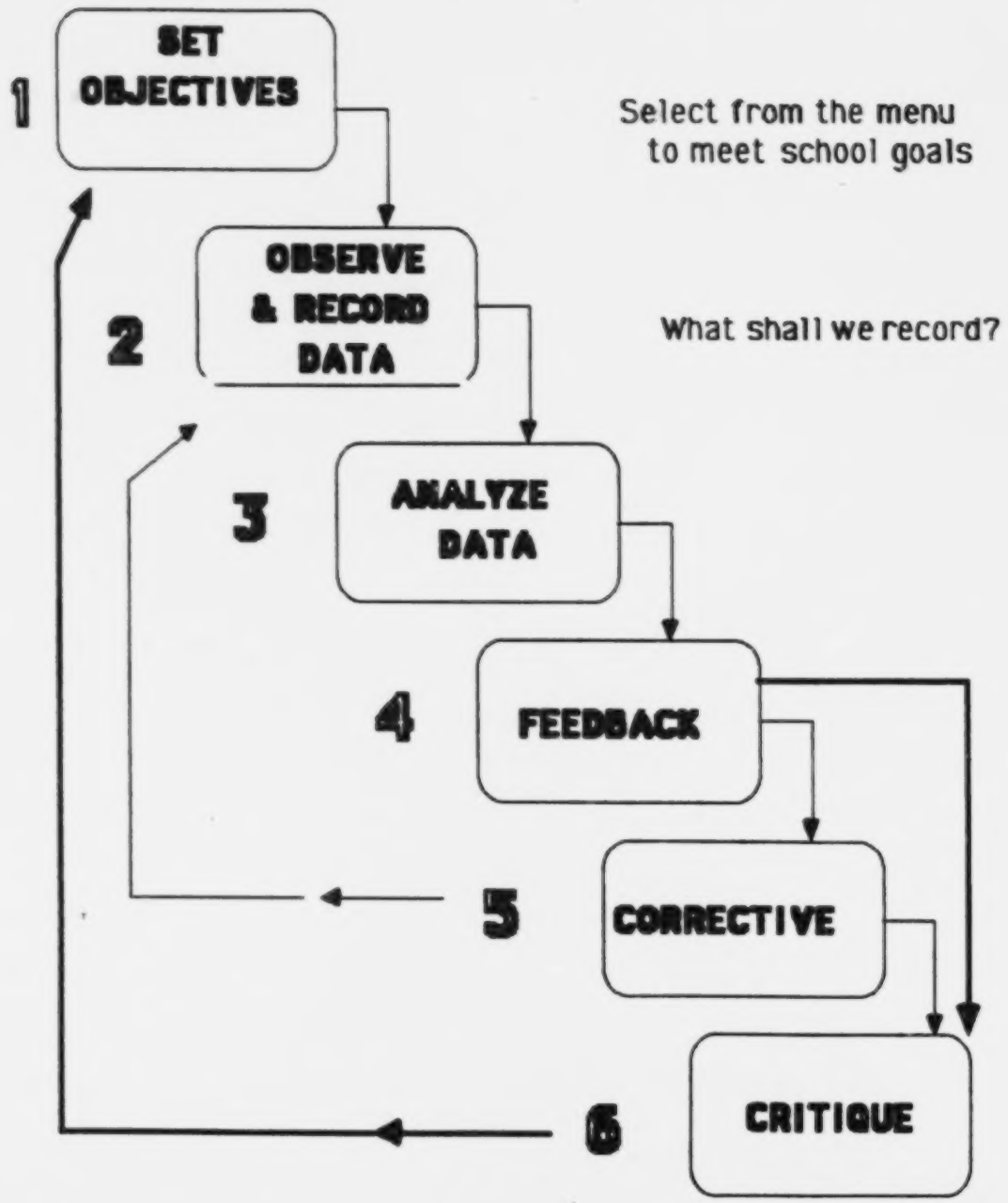

Figure 1

behaviors used by teachers and the discrepancy in the view of elementary teachers between the importance of certain classroom behaviors and the frequency with which they tend to be used. It also lessens the tendency to emphasize doing only the tried and true with which both are comfortable. The place this

The list of research-based instructional techniques presented is intended not as a prescription but as a menu. Consideration of the items and their impact on students need to be discussed by participants. Attention may need to be given to observation alternatives such as scripting; videotaping; or recording data on such things as interaction or time on task. Certainly the possibility of peer critiquing should not be overlooked.

Certain teacher behaviors have emerged as desirable practices in the elementary classroom, and they are deserving of presentation to teachers as possible areas of imporovement. It is these that will be included on the menu There is no assumption being made that these behaviors are all inclusive, only that they are behaviors that merit consideration and are ones that are backed up by a body of research.

The selected behaviors have been divided into five areas. The first is a set of behaviors related to the selection and preparation of materials, termed The Teacher as Organizer. The second section consists of a review of the research on methods that form a part of the active teaching process, and is called The Teacher as Instructor. The Teacher as Expediter includes those techniques that enhance the students' successful engagement in academic learning. The fourth consideration consists of methods that improve student involvement with learning activities and materials and is called the Teacher as Facilitator. The final set of behaviors consists of those that involve managing student behavior, and is called The Teacher as Monitor.

Research leads to the conclusion that in organizing instruction the teacher should determine if students possess the necessary entry level behavior, select materials for a variety of stimuli, prepare appropriate materials prior to the lesson, and handle and present those materials in an orderly manner. In the active teaching process, the teacher need to be involved with academic content, give clear sequential directions, emphasize main points, ask questions, conduct reviews, and ignore irrelevancies. It seems that when teachers approach subject matter in a direct business-like way and organize learning around questions they pose,students show greater task orientation and greater gains in achievement. Since it is the job of the teacher to see that children have a high rate of successful academic learning time, successful teachers tend to expedite the business of learning by begining promptly, shifting without delay, having smooth transitions, and continuing on task. This efficiency results in a greater sense of purpose on the part of the student and in higher achievement. As a monitor of student behavior, the successful teacher usually specifies conduct rules, stops misconduct, and suggests alternative behavior.

These conclusions are reflected in Figure 2 which is designed for presentation to faculty members. The sections which follow explain and document the items which have been included on the menu.

A MENU FOR CLASSROOM OBSERVATIONS

	PRIORITY	SELECT	COMMENTS
The Teacher As Organizer			
Determines students are ready			
Selectes materials for variety			
Prepares materials prior to lesson			
Presentes materials appropriately			
Handles materials in orderly manner			
The Teacher As Instructor			
Has academic content			
Gives clear sequential directions			
Emphasizes main points			
Asks low order questions			
Asks high order questions			
Conducts reviews			
Ignores irrelevancies			
The Teacher As Expediter			
Begins promptly			
Shiftes without delay			
Has smooth transitions			
Maintains momentum			
Continues on task			
The Teacher As Facilitator			
Circulates and supervises seatwork			
Assists individual students			
Checks comprehension of seatwork			
Praises specific behavior			
Evaluates specific responses			
Explaines student errors			
The Teacher As Monitor			
Specifies Conduct rules			
Stops or avoides misconduct			
Suggests alternative behaviors			

Figure 2

The Teacher as Organizer

There is one teacher behavior that must take place when the students are not present--that is the planning and organizing of materials. Kounin (1970) was one of the first to recognize that students spend much of their classroom time working independently and that the appropriateness of assigned work influences task engagement. Clark and Yinger (1979) pointed out that one of the purposes of planning is to collect and organize materials and McCutcheon (1980) explained that planning is a brief outline that functions as a means of organizing experiences and materials.

Bloom (1976) highlighted the importance of attending to students' prior learning when he stated that as much as 80% of the variance in post-test scores may be accounted for by pretest scores alone. Therefore it is essential to provide for appropriate cognitive entry level materials by carefully examining students' previous achievement (Squires, Huitt & Segars, 1983).

Estimates indicate that 85-90% of American teachers follow one or another basal textbook and this in itself places a severe restriction on instructional alternatives (Duffy and Ball, 1983). Doyle (1983) stated that classroom studies indicate that teachers tend to rely on instructional materials to carry out the academic tasks. This would mean that these materials must be well organized in order to have students reach the desired objectives. If as Doyle says, elementary students spend two-thirds of their time doing seatwork using printed worksheets, it may explain the critical need for material to be teacher prepared or adapted and outcome specific. He cited evidence to suggest that students may have difficulty learning with any degree of comprehension from the instructional materials they often encounter in classes.

This need to plan for and organize materials before beginning instruction was also indicated by Weinstein (1984) who stated that materials for voluntary activities need to be well-organized, accessible but out of the line of traffic, and attractively displayed. This voluntary material may be important because classroom teachers must keep large numbers of students engaged for five hours or more preparing them to do well on a particular standardized achievement test (Duffy and Ball, 1983).

In organizing instruction the teacher needs to determine if students are ready, select materials for a variety of stimuli, prepare appropriate materials prior to the lesson and then handle and present those materials in an orderly manner.

The Teacher as Instructor

When teachers are in front of a group directly instructing students, there are many factors which affect whether or not learning will occur. Only a few of these are directly under the control of the teacher. These few include the manner in which content is presented, questions asked, emphasis made, material repeated and reviews conducted.

A strong determinant of success, judging from reviews by Berliner (1982), Rosenshine (1976, 1977), Gow (1977), Ruff (1978) and Medley 1978) is related to the use of learning time in the classroom. The reviewers concluded that greater student outcomes are achieved when time in class is spent on task-related content activities rather than on non academic activities. Stallings and Kaskowitz (1974), Coker, Lorenz and Coker (1976), McDonald and Elias (1976) and Soar (1973) all found that effective teachers of primary children spent less class time discussing matters unrelated to lesson content. This was confirmed by Fisher and others (1978) who found

that pupils in high achieving classes spent less time in non academic activities.

One of the ways that teachers involve students with academic content is through the questions they ask. The hundreds of questions that teachers ask during recitation in a typical school day is the most common method of eliciting student response (Gall,1984). When the learning of students who participated in questioning sessions about a previously read textbook passage was compared with that of students who were not asked questions, researchers found that students who had been asked questions performed better on various measures of fact and higher cognitive learning (Gall, 1978). This suggests that irrespective of cognitive level, questioning as an instructional technique is effective.

Questions are often classified by whether they require students to recall previously presented information or whether the student needs to engage in independent thinking. Stallings and Kaskowitz (1974) identified a pattern of factual question-student response-teacher feedback as favoring student achievement among low SES in the primary grades. Rosenshine (1976,1977) reviewed correlational studies and decided that students learn best when asked factual or "narrow" questions where the teacher can expect them to know rather than guess and thus immediately give feedback as to correct and incorrect responses. He also concluded that while low ability students did best with factual questions, high ability students did best with probing and redirection. These conclusions were based on studies involving disadvantaged primary age youngsters

The division of questions into low order and higher level questions based on the Taxonomy of the Cognitive Domain which Bloom and others developed in 1956 is an area of conflicting research. Rosenshine (1979) suggests that part of the problem in evaluating questioning is that there is confusion about what

is meant by the expression "high-level cognitive question." Berliner (1983) stated that lower-order questions have been found to serve positive functions by promoting participation, providing high success frequency for students and establishing a factual data base from which higher-order discussons arise.

Most recent reviewers have concluded that measures of type or level of question do not correlate consistently with learning gains with all pupils and that it is therefore not a fruitful field for further study. One exception to this is a meta-analysis of experiments conducted on the effects of emphasizing fact or high cognitive questions in which Redfield and Rousseau (1981) concluded that there was a positive effect on student achievement with higher level questions. The type and number of studies (20) and the operational definitions of "higher level" may have contributed to the conclusion.

In contrast to the conflicting data for levels of questions, several studies agree in showing that the frequency of questions is related to learning (Brophy and Evertson, 1976, Soar, 1973, Stallings, 1975). Rosenshine (1983) concluded that the frequency of questions asked in the elementary grades is more important that the type of questions.

It is not only the type of and frequency of questions that influence learning but the wording and the emphasis they imply. Observational studies suggest that student progress will be hindered if the student lacks or is confused about even one important concept (Brophy, 1983). Pinney (1969) analyzed transcripts of classroom discourse of 32 experienced teachers. The results showed that the frequency of marker expressions such as "remember this" and "this is important" was consistently higher for teachers whose students were higher in achievement. In 1980 Smith and Cotten, studying the effect of lesson vagueness and discontinuity on student achievement and

attitudes, showed that a high frequency of vagueness terms is negatively associated with student achievement in upper grade mathematics.

Emphasising what is considered important is a close correlate of conducting reviews. Rosenshine (1982) identified weekly and monthly review as key instructional functions. Wright and Nuthall in 1970 indicated that in 3rd grade science, review of the previous lesson at the beginning of the new lesson is not clearly related to achievement, but that review at the end of the lesson is positively correlated.

In 1977 Good and Grouws did naturalistic observations of effective and ineffective teachers in fourth grade math and identified the conducting of reviews as one of the characteristic behaviors of effective teachers. They then developed an instructional model for mathematics instruction, taught it to teachers, and verified it in experimental studies (Good and Grouws, 1979). This model included review at the beginning of new lessons as well as weekly and monthly reviews for maintenance.

One can conclude that in the active teaching process, research shows that the teacher should be involved with academic content, give clear sequential directions, emphasize main points, ask questions, conduct reviews, and ignor irrelevancies. It seems that when teachers approach subject matter in a direct business-like way, organize learning around questions they pose, and occupy the center of attention, then students show greater task orientation and greater gains in achievement.

The Teacher as Expediter

Teacher behaviors which affect the quality of the time which pupils spend in a school are likely to have a direct effect on student achievement. Studies which have dealt with the use of time have used different phrases and

different operational definitions. Rosenshine (1979) looked at allocated time and instructional time. Allocated time refered to the part of the daily schedule that specifically allocated time for academic as opposed to non academic activities while instruction time referred to that part of allocated time that was actually spent instructing. Engaged time or time on task refers to that part of instruction time when the students are actually engaged in learning (Anderson, 1976, Good and Beckerman,1978). The narrowest level is academic learning time which is that portion of engaged time during which the learner is experiencing stong academic success (Stallings and Kaskowitcz, 1974, Fisher, 1978).

Successful use of time requires a teacher who keeps the activity moving and keeps it moving with smoothness (Kounin, 1983). Beginning promptly and shifting without delay will increase the amount of academic learning time. Berliner (1984) stressed that "the more a teacher covers the more students seem to learn" and explained that simple advice like writing assignments for different groups on the board before class can save minutes of instructional time every day and hours per year. Strong and consistent positive relationships between student engagement in work and learning gains for second and third grade students was established by Brophy and Evertson (1976). Good and Beckerman (1978) observed that on-task behavior was slightly higher for high achieving students in their study of 6 sixth grade classrooms in two schools.

Fisher and others (1980) found that time spent waiting between instructional activities negatively correlated with the student engagement rate in both reading and math in second grade suggesting that distractions occurring during this waiting period transferred to less engagement during subsequent classes. Smooth transitions assist in increasing academic learning time for, as Fisher and others (1978) showed, it is possible to lose

up to one fourth of the instructional time each day through inefficient transition.

It is the job of the teacher to see that children have a high rate of academic learning time. In order to expedite the business of learning, the teacher should begin promptly, shift without delay, have smooth transitions, continue on task, and maintain momentum. This efficiency should result in a greater sense of purpose on the part of the student and in higher achievement.

The Teacher as Facilitator

Teachers are not always engaged in directly instructing groups of students. What is done during the times that children are working independently will also affect student achievement.

Medley (1977) found that effective teachers actively supervised pupils who were working independently. They spent more time circulating and checking pupil's work. Brophy and Evertson (1976) also found effective teachers giving initial demonstrations then quickly moving to eliciting student's performance and providing individual feedback. Soar (1973), Stallings and Kaskowitz (1974), and Coker, Lorentz, and Coker (1976) all note that achievement is lower in classes which display the largest amounts of unsupervised seatwork. Both Brophy and Everson (1976) and Good and Grouws (1977) found that teacher initiated contacts during seatwork were negatively related to achievement gain, whereas student initiated contacts were positively correlated with achievement. Ruff (1978) concluded that the effective teacher is one who constantly monitors work while being available to provide answers to student- initiated questions. Berliner (1984) summarized by saying that "it appears that the classroom in which the

teacher moves rapidly about, monitoring students and raising the number of substantive interactions with students, is the class where students do well."

Even the physical location of the teacher can influence performance. Weinstein (1984) in studying seating arangements showed that teachers of younger children need to move around the room whenever possible, to purposely direct questions, comments, and feedback to students seated in the rear and on the sides.

Anderson, Evertson and Brophy (1979) found that teacher responses that include information about why the student answer is correct are helpful to other students and achievement gain is positively related to using student response to give steps or methods used to get the right answer. It is therefore important for teachers to check for comprehension of seatwork or homework (Emmer and Evertson, 1981).

Medley (1978) looking at Stallings and Kaskowitz (1974) and Brophy and Evertson (1976) concluded that effective teachers use more praise and positive motivation in their interactions with students. Stallings and Kaskowitz (1974) found that praise directed toward academic activities is effective but is negatively correlated with student achievement when given for nonacademic behaviors. Berliner and Rosenshine (1977) therefore determined that both teacher praise and criticism directed toward students are effective when focused on academic activities while other types of non substantive contacts result in either negative or non-significant correlations.

Brophy (1981) carefully defined effective praise statements as detailed expressions of positive teacher responses that give information about the value of the response. He then reviewed the functions of praise and concluded that praise can be effective if focused on specific achievements that make the relationship between praise and behavior explicit.

Children need to have a sense of meaning and order in what they do as a basic framework for learning. To facilitate meaningful learning activities the teacher should circulate and assist students consistently, check comprehension of seatwork, provide an explanation of student errors, and praise specific behavior or correct response.

The Teacher as Monitor

According to Evertson et al. (1984) there are two views of effective classroom management. The first view emphasizes techniques for dealing with students who are disruptive or otherwse uncooperative. The second view emphasizes setting the stage for teaching by preventing problems before they occur.

Three studies (Herman and Traymontana, 1971, Advani and Beaumaster, 1973, and Greenwood, 1974) found that setting up specific class rules leads to reduction in disruptive pupil behavior. Greenwood reported that rules plus feedback increased appropriate behavior over 70% and rules plus feedback and individual consequences increased appropriate behavior up to 84%. These earlier studies dealt with behavior modification with special populations but this led to management systems for whole classrooms such as Reality Therapy and Assertive Discipline (Glaser, 1979 and Cantor and Cantor,1976).

Kounin (1970) found that successful classroom managers kept their students actively engaged in productive classroom work, thus minimizing the amount of trouble that they had to deal with. It was then found that teachers with fewer corrections for misbehavior had nigher student achievement (Anderson, Evertson, and Brophy, 1979). Emmer and Anderson (1980) found greater achievement on the California Achievement Test in classrooms where rules and procedures were established and pupils' behavior was monitored.

When Veenman (1984) reviewed 83 studies on the problems that beginning teachers perceive and experience, he concluded that the most frequently perceived problem is classroom discipline. Class discipline was also rated the highest priority in principle's reports with success in teaching often seen in terms of discipline. There are techniques which are useful even though they are aimed largely at intervening once problems have occurred (Brophy, 1983) for effective managers clearly state what they will and will not tolerate, focus on what students should be doing, and if need be teach students how to do it. Training studies show that strategies such as planned classroom rules, clear consequences and rewards, carefully monitored student work and behavior, and stopping inappropriate behavior quickly can all be taught to most teachers relatively efficiently (Evertson, Hawley & Zlotnik,1984).

Soar and Soar (1976) in reviewing their own studies took an intermediate position that neither extreme degrees of teacher control nor of pupil freedom are functional. However teacher criticism of student behavior that included shouting, scolding and sarcasm was found to be negatively related to achievement gain (Rosenshine, 1977).

By finding more efficient ways to manage the classroom with a minimum of time lost to social activity and by controling students' behavior, teachers can increase the amount of time spent on learning and thus enhance achievement (Goodlad, 1984). As a monitor of student behavior, the teacher would be expected to specify conduct rules, stop misconduct, and suggest alternative behavior.

Conclusion

Despite the limited generalizability of many of the studies, research has produced a set of findings that administrators may find useful in observing teachers to evaluate their performance. One can conclude that if an administrator used the rating sheet included here, that person would be basing an observation on research grounded criteria. This is not to imply that all criteria that ought to be considered are included or that one observation would yield sufficiently accurate and representative data. It also does not preclude a clinical supervision model where teacher and evaluator plan together those areas of immediate concern. The document could however form a basis to begin an empirically based rating system.

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